

WHAT IS CLAIMED IS:

1. A lithographic projection apparatus, comprising:
  - a radiation system configured to form a projection beam of radiation from radiation emitted by a radiation source;
  - a support configured to hold a patterning device which is to be irradiated by the projection beam to pattern the projection beam;
  - a substrate table configured to hold a substrate;
  - a projection system configured to image an irradiated portion of the patterning device onto a target portion of the substrate; and
  - a channel barrier near the source configured to prevent material emanating from the source from propagating along an optical axis, the channel barrier comprising a center and a number of elongated channel members each having a width direction transverse to the optical axis and a length direction extending generally in the direction of the optical axis, wherein the channel barrier is rotatable around the optical axis, the lithographic projection apparatus further comprising a drive connected to the channel barrier configured to rotate the channel barrier around the optical axis.
2. A lithographic projection apparatus according to claim 1, wherein the center of the channel is placed on the optical axis.
3. A lithographic projection apparatus according to claim 1, wherein the channel members are focused on the radiation source.
4. A lithographic projection apparatus according to claim 1, wherein the channel members are plate-shaped.
5. A lithographic projection apparatus according to claim 1, wherein the channel members located close to the optical axis form a honeycomb structure in a plane perpendicular to the optical axis and extend parallel or substantially parallel to the optical axis.
6. A lithographic projection apparatus according to claim 1, wherein the drive is adapted to rotate the channel barrier at a speed of between 1 and 50 rotations per second.
7. A lithographic projection apparatus according to claim 1, wherein the drive is adapted to rotate the channel barrier at a speed of between 1 and 10 rotations per second.
8. A lithographic projection apparatus according to claim 1, further comprising a supplementary channel barrier mounted near the channel barrier.

9. A lithographic projection apparatus according to claim 8, wherein the supplementary channel barrier is mounted substantially coaxial with respect to the channel barrier.
10. A lithographic projection apparatus according to claim 8, wherein the supplementary channel barrier is rotatably mounted with respect to the optical axis.
11. A lithographic projection apparatus according to claim 10, wherein the supplementary channel barrier has a direction of rotation opposite to the direction of rotation of the channel.
12. A lithographic projection apparatus according to claim 10, wherein the supplementary channel barrier has substantially the same direction of rotation as the direction of rotation of the channel, and has a rotational velocity different from the rotational velocity of the channel.
13. A lithographic projection apparatus according to claim 8, wherein the supplementary channel barrier is non-rotationally mounted.
14. A channel barrier for use in a lithographic projection apparatus, the channel barrier comprising:
  - a plurality of elongated channel members each having a width direction transverse to an optical axis and a length direction extending generally in the direction of the optical axis, wherein the channel barrier is configured to be rotatable around the optical axis, the channel barrier further comprising a drive connected to the channel barrier configured to rotate the channel barrier around the optical axis.
15. A method of manufacturing an integrated structure by a lithographic process, the method comprising:
  - providing a radiation system configured to form a projection beam of radiation from radiation emitted by a radiation source;
  - patterning the projection beam;
  - projecting the patterned projection beam onto a target portion of a substrate at least partially covered with a radiation sensitive material;
  - providing a channel barrier near the source to prevent material emanating from the source from propagating along an optical axis, the channel barrier comprising a center and a number of elongated channel members each having a width direction transverse to the optical axis and a length direction extending generally in the direction of the optical axis; and
  - rotating the channel barrier around the optical axis.